

AMENDMENT TO THE CLAIMS

Please cancel claims 2-6, 12-16, 18, 21-24, 34-37 (claims 46-50 having been previously canceled) and amend claims 1, 8, 17, and 33 as follows:

1. (Currently Amended) A method of selectively inducing apoptosis of a malignant cell comprising:

providing a calcium-activated potassium channel activator; and
administering to a malignant cell a the calcium-activated potassium channel activator in an amount sufficient to induce apoptosis of the cell,
wherein the malignant cell is a glioma or astrocytoma cell and the calcium-activated potassium channel activator is 1,3-dihydro-1-[2-hydroxy-5-(trifluoromethyl)phenyl]-5-(trifluoromethyl)-2H-benzimidazole-2-one.

Claims 2-6 (Canceled).

7. (Original) The method of claim 1, wherein the malignant cell is in vitro.

8. (Currently Amended) A method of selectively inhibiting the proliferation of malignant cells compared to non-malignant cells in a mixed population of malignant and non-malignant cells, comprising:

providing a calcium-activated potassium channel activator; and
administering to the mixed population of malignant and non-malignant cells a the calcium-activated potassium channel activator in an amount sufficient to induce apoptosis of at least a plurality of malignant cells compared to non-malignant cells, thereby selectively inhibiting the proliferation of malignant cells,
wherein the malignant cells are glioma or astrocytoma cells and the calcium-activated potassium channel activator is 1,3-dihydro-1-[2-hydroxy-5-(trifluoromethyl)phenyl]-5-(trifluoromethyl)-2H-benzimidazole-2-one.

9. (Original) The method of claim 8, wherein the mixed population of malignant and non-malignant cells is an in vitro population.

10. (Original) The method of claim 8, wherein the mixed population of malignant and non-malignant cells is in a tumor, in vivo, in a mammalian subject.

11. (Original) The method of claim 10, wherein said mammalian subject is a human, a non-human primate, a canine, a feline, a bovine, a porcine, an ovine, a mouse, a rat, a gerbil, a hamster, or a rabbit.

Claims 12-16 (Canceled).

17. (Currently Amended) A method of inhibiting the growth of a malignant tumor in a mammalian subject, comprising:

providing a calcium-activated potassium channel activator; and

administering to a mammalian subject having a malignant tumor that comprises a malignant cell, a the calcium-activated potassium channel activator under conditions and in an amount sufficient to induce apoptosis of the cell, whereby growth of the malignant tumor is inhibited, and

wherein the malignant cell is a glioma or astrocytoma cell and the calcium-activated potassium channel activator is 1,3-dihydro-1-[2-hydroxy-5-(trifluoromethyl)phenyl]-5-(trifluoromethyl)-2H-benzimidazole-2-one.

Claim 18 (Canceled).

19. (Original) The method of claim 17, wherein the malignant tumor is a glioma, a glioblastoma, an oligodendroglioma, an astrocytoma, an ependymoma, a primitive neuroectodermal tumor, an atypical meningioma, an malignant meningioma, a neuroblastoma, a sarcoma, a melanoma, a lymphoma, or a carcinoma.

20. (Original) The method of claim 17, wherein the malignant tumor is contained in the skull, brain, spine, thorax, lung, abdomen, peritoneum, prostate, ovary, uterus, breast, stomach, liver, bowel, colon, rectum, bone, lymphatic system, or skin, of said subject.

21-24 (Canceled).

25. (Original) The method of claim 17, wherein said mammalian subject is a human, a non-human primate, a canine, a feline, a bovine, a porcine, an ovine, a mouse, a rat, a gerbil, a hamster, or a rabbit.

26. (Original) The method of claim 17, wherein administering the calcium-activated potassium channel activator is by intravenous or intra-arterial injection.

27. (Original) The method of claim 17, wherein the tumor is an intracranial tumor and the calcium-activated potassium channel activator is administered by intracarotid infusion.

28. (Original) The method of claim 17, wherein the calcium-activated potassium channel activator is administered to the mammalian subject by a bolus injection.

29. (Original) The method of claim 17, wherein the calcium-activated potassium channel activator is administered to the mammalian subject in an amount from about 0.075 to 1500 micrograms per kilogram body mass.

30. (Original) The method of claim 17, wherein the calcium-activated potassium channel activator is administered to the subject in an amount from about 0.075 to 150 micrograms per kilogram body mass.

31. (Original) The method of claim 17, wherein the calcium-activated potassium channel activator is administered to the mammalian subject at a dose rate of about 0.075 to about 100 $\mu\text{g kg}^{-1} \text{ min}^{-1}$ for up to about 30 minutes.

32. (Original) The method of claim 31, wherein the calcium-activated potassium channel activator is administered to the mammalian subject at a dose rate of about 0.075 to about 15 $\mu\text{g kg}^{-1} \text{ min}^{-1}$.

33. (Currently Amended) A method of inhibiting the growth of a glial tumor in a mammalian subject comprising:

providing a calcium-activated potassium channel activator; and

administering to a mammalian subject having a glial tumor that comprises a malignant cell, a the calcium-activated potassium channel activator under conditions and in an amount sufficient to induce apoptosis of the cell, whereby growth of the malignant tumor is inhibited, and

wherein the calcium-activated potassium channel activator is 1,3-dihydro-1-[2-hydroxy-5-(trifluoromethyl)phenyl]-5-(trifluoromethyl)-2H-benzimidazole-2-one.

Claims 34-37 (Canceled).

38. (Original) The method of claim 33, wherein said mammalian subject is a human, a non-human primate, a canine, a feline, a bovine, a porcine, an ovine, a mouse, a rat, a gerbil, a hamster, or a rabbit.

39. (Original) The method of claim 33, wherein administering the calcium-activated potassium channel activator is by intravenous or intra-arterial injection.

40. (Original) The method of claim 33, wherein the tumor is an intracranial tumor and the calcium-activated potassium channel activator is administered by intracarotid infusion.

41. (Original) The method of claim 33, wherein the calcium-activated potassium channel activator is administered to the mammalian subject by a bolus injection.

42. (Original) The method of claim 33, wherein the calcium-activated potassium channel activator is administered to the mammalian subject in an amount from about 0.075 to 1500 micrograms per kilogram body mass.

43. (Original) The method of claim 33, wherein the calcium-activated potassium channel activator is administered to the subject in an amount from about 0.075 to 150 micrograms per kilogram body mass.

44. (Original) The method of claim 33, wherein the calcium-activated potassium channel activator is administered to the mammalian subject at a dose rate of about 0.075 to about 100 $\mu\text{g kg}^{-1} \text{ min}^{-1}$ for up to about 30 minutes.

45. (Original) The method of claim 33, wherein the calcium-activated potassium channel activator is administered to the mammalian subject at a dose rate of about 0.075 to about 15 $\mu\text{g kg}^{-1} \text{ min}^{-1}$.

46-50 (Canceled).